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2 What is claimed is:

- 3 1. A hand cart for lifting and transporting a container with a tapering neck at its upper end,
4 the hand cart comprising:
5 a base frame having at least one wheel means for movement;
6 a cradle for engaging the bottom of the container, the cradle being supported by the
7 base frame;
8 an elongated bar being defined by an upper end and a lower end; the lower end being
9 securely attached to the base frame and the cradle;
10 an arm structure being defined by a first edge and an opposite second edge, the first
11 edge being mounted to the exterior of the bar at an intermediate point, the intermediate
12 point being at a position relative to the height of the container from the base frame, the
13 arm structure extending outwardly from the first edge along its horizontal axis to a set
14 distance to the opposite second edge;
15 a bumper mechanism integrated into the opposite second edge at the set distance
16 therein, the bumper mechanism for contacting the neck of the container thereby causing
17 the container to tilt forward as the container is loaded onto the base frame;
18 a catch mechanism within the arm structure;
19 a means for engaging and disengaging the catch mechanism with the top of the
20 container; and
21 a hand assembly being mounted upon the upper end of the bar such that the hand-cart
22 can be moved into a forward and backward position upon the wheel means.
- 23 2. The handcart of claim 1 wherein the catch mechanism further comprises:
24 a recess situated within the underside portion of the arm structure;
25 the recess dimensioned to accommodate the circumference of the top of the container;
26 and
27 the recess being situated from the first edge of the arm structure at a position which
28 allows the top of the container to align directly underneath the recess as the bottom of
29 the container is placed on the base frame.
- 30 3. The handcart of claim 1 wherein the catch mechanism further comprises:
31 an orifice situated within the of the arm structure;

1 the orifice having dimensions to accommodate the circumference of the top of the
2 container; and

3 the orifice being situated from the first edge of the arm structure at a position which
4 allows the top of the container to align directly underneath the orifice as the bottom of
5 the container is placed on the base frame.

6 4. The handcart of claim 1 wherein the hand assembly further comprises:

7 a pair of parallel spaced apart support members;

8 the pair of support members each having an upper and lower end;

9 a grip member connected to each upper end; and

10 each lower end mounted upon the upper end of the bar member.

11 5. The handcart of claim 1 wherein the means for engaging and disengaging the catch
12 mechanism further comprises:

13 a lever mechanism situated at the upper end of the bar; and

14 the lever operably connected through the interior of the bar to the first edge of the arm
15 structure;

16 the first edge of the arm structure being partially slideably mounted upon the exterior of
17 the elongated bar wherein the lever mechanism can vertically lower and lift the arm
18 structure to respectively engage and disengage the catch mechanism with the top of the
19 container.

20 6. The handcart of claim 1 wherein the cradle is dimensioned to fit the bottom of the
21 container.

22 7. The handcart of claim 6 wherein the base frame further comprises:

23 a rigid vertical plate member and a rigid horizontal plate member;

1 the horizontal plate member being aligned perpendicular to the vertical plate member;
2 and
3 the cradle being supported by the horizontal plate member; and
4 the vertical plate member being securely coupled to the cradle and the bar member.

5 8. The handcart of claim 6 wherein the base frame further comprises:

6 a rigid horizontal plate member;
7 the cradle being supported by the horizontal plate member; and
8 the cradle being securely coupled to the bar member.

9 9. The handcart of claim 4 wherein the arm structure has a polygonal shape.

10 10. The hand cart of claim 1 wherein the bumper mechanism is a recess within the opposite
11 second edge of arm structure dimensioned to fit the curvature of the neck of the container.

12 11. The hand cart of claim 1 wherein the bumper mechanism is the opposite second edge of
13 the arm structure.

14 12. The handcart of claim 1 wherein the means for engaging and disengaging the catch
15 mechanism further comprises:

16 a lever mechanism situated at the upper end of the bar; and
17 the lever operably connected through the interior of the bar to the first edge of the arm
18 structure;
19 the first edge of the arm structure being hingedly connected to exterior of the elongated
20 bar such that the lever mechanism can raise and lower the arm structure along at least a
21 thirty degree angle path to respectively engage and disengage the catch mechanism
22 with the top of the container.

1 13. The handcart of claim 1 wherein the means for engaging and disengaging the catch
2 mechanism further comprises:

3 a lever mechanism situated at the lower end of the bar; and
4 the lever mechanism operably connected through the interior of the bar to the first edge
5 of the arm structure;
6 the first edge of the arm structure being hingedly connected to exterior of the elongated
7 bar such that the lever mechanism can raise and lower the arm structure along at least a
8 thirty degree angle path to respectively engage and disengage the catch mechanism
9 with the top of the container.

10 14. The handcart of claim 1 wherein the means for engaging and disengaging the catch
11 mechanism further comprises:

12 a lever mechanism situated at the lower end of the bar; and
13 the lever mechanism operably connected at an intermediate point to the upper surface
14 of the arm structure;
15 the first edge of the arm structure being hingedly connected to exterior of the elongated
16 bar such that the lever mechanism can raise and lower the arm structure along at least a
17 thirty degree angle path to respectively engage and disengage the catch mechanism
18 with the top of the container.

19 15. The handcart of claim 1 wherein the catch mechanism further comprises:

20 an U-shape slotted hook situated within the arm structure; and
21 the U-shape slotted hook dimensioned to accommodate the circumference of the top of
22 the container

1 the U-shaped hook extending laterally from a side edge of the arm structure at a an
2 intermediate position which allows the hook to engage the neck of the container as the
3 bottom of the container is placed on the base frame.

4 16. The handcart of claim 15 wherein the means for engaging and disengaging the catch
5 mechanism further comprises:

6 the first edge of the arm structure being rotatably connected to exterior of the elongated
7 bar such that the arm structure can rotate clockwise and counterclockwise along at least
8 a thirty degree angle path to respectively engage and disengage the catch mechanism
9 with the top of the container.

10 17. The handcart of claim 16 wherein the elongated bar member has a cylindrical shape.

11 18. The hand cart of claim 1 wherein the elongated bar is formed from a sheet of rigid metal
12 material with its vertical edges bent backward to form an opened back casing.

13 19. The hand cart of claim 1 wherein the elongated bar is a hollow rectangular casing formed
14 from a rigid metal material.

15 20. A method of lifting and transporting a container from an upright position, the method
16 comprising:

17 a. providing a hand cart with a base frame supporting a cradle connected to an
18 elongated bar with a handle mounted upon the top, an arm structure with a catch
19 mechanism and a bumper mechanism, and lever mechanism operable connected to
20 the arm structure;

21 b. placing the hand-cart with the elongated bar member perpendicular to the floor and
22 parallel to the container with the arm structure aligned perpendicular to the top of
23 the container;

- c. placing a hand on the hand assembly;
- d. placing the corresponding foot against the rear side of the bottom of the bar member;
- e. pushing the hand assembly forward such that the bumper mechanism of the arm structure contacts the neck of the container tilting the bottom of the container at least thirty degrees;
- f. simultaneously with step e, pushing the base frame forward with the corresponding foot such that the base frame slides underneath the bottom of the container and the cradle engages the bottom of the container;
- g. pulling the lever mechanism to raise the arm structure to allow the container to sit upright on the base frame with the top of container aligned directly underneath the catch mechanism; and
- h. releasing the lever mechanism for the catch mechanism to engage the top the container.

21. A hand cart for lifting and transporting a container from an upright position, the hand cart comprising:

- a base frame having a rigid horizontal plate member supported by at least one wheel means for movement;
- a cradle for engaging the bottom of the container, the cradle being supported by the horizontal plate member of the base frame;
- an elongated bar being defined by an upper end and a lower end; the lower end being securely attached to the base frame and the cradle;

1 an arm structure being defined by a first edge and an opposite second edge, the first
2 edge being mounted to the exterior of the bar at an intermediate point, the intermediate
3 point being at a position relative to the height of the container from the base frame, the
4 arm structure extending outwardly from the first edge along its horizontal axis to a set
5 distance to the opposite second edge;
6 a bumper mechanism integrated into the opposite second edge at the set distance such
7 that the neck of the container is contacted as the container is loaded onto the base
8 frame;
9 a catch mechanism within the arm structure;
10 the catch mechanism further comprising:
11 an orifice situated within the of the arm structure;
12 the orifice having dimensions to accommodate the circumference of the top of the
13 container; and
14 the orifice being situated from the first edge of the arm structure at a position which
15 allows the top of the container to align directly underneath the orifice as the bottom
16 of the container is placed on the base frame;
17 a lever mechanism situated at the upper end of the bar;
18 the lever operably connected through the interior of the bar to the first edge of the arm
19 structure;
20 the first edge of the arm structure being partially slideably mounted upon the exterior of
21 the elongated bar wherein the lever mechanism can vertically lower and lift the arm
22 structure to respectively engage and disengage the catch mechanism with the top of the
23 container;

1 and
2 a hand assembly being mounted upon the upper end of the bar such that the hand-cart
3 can be moved into a forward and backward position upon the wheel means.
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